



Compliance Assurance Monitoring (40 CFR 64)

Background

IDEM has required compliance monitoring provisions in Title V and FESOP permits since these permits were first issued beginning in 1996. While many rules and regulations include monitoring or testing requirements, this is not true for all. The Title V and FESOP rules require that where an applicable requirement does not include sufficient monitoring or testing requirements, the department must include sufficient requirements in the permit. See 326 IAC 2-7-5(3)(A)(ii) and 326 IAC 2-8-4(3)(A)(ii).

On October 22, 1997, the U.S. EPA promulgated a final federal rule for compliance assurance monitoring (CAM). The regulations require owners or operators of certain emission units at Title V (Part 70) sources to conduct monitoring that satisfies particular criteria established to provide a reasonable assurance of compliance with emission limitations. Monitoring will focus on units that have an uncontrolled potential to emit (PTE) greater than or equal to the major source thresholds and rely on pollution control equipment to achieve compliance.

Major source threshold means 100 tons per year of the following:

- Particulate matter (PM₁₀)
- Sulfur dioxide (SO₂)
- Nitrogen oxides (NO_x)
- Carbon monoxide (CO)
- Volatile organic compounds (VOCs)[*except*

for Lake and Porter Counties where the VOC threshold is 25 tpy].

The threshold for hazardous air pollutants (HAPs) is 10 tpy of a single (HAP) or 25 tpy of any combination of HAPs.

IDEM has initiated a rulemaking that would incorporate the CAM regulation into state rules and to clarify compliance monitoring requirements for all sources required to have an operating permit.

The purpose of the state and federal requirements is to maintain compliance with emission limits by monitoring control equipment to assure that once the control equipment is installed or otherwise employed, it is properly operated and maintained so that the equipment and its operation does not decline to the point where noncompliance may occur.

Applicability

The federal CAM rule applies to units at Part 70 sources subject to emission limitations and using pollution control devices to comply with the limitations. The emission limitations include federal regulations such as New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP). The limitations also include rules under Indiana's state implementation plan (SIP) contained in 326 IAC.

The following criteria should be used to

determine if the federal CAM rule applies:

- Is the unit located at a major source required to obtain a Part 70 operating permit?
- Is the unit subject to an emission limitation specified in a state rule or federal regulation?
- Is a pollution control device used to achieve compliance with the rule or regulation?
- Is the uncontrolled PTE of the controlled pollutant from the unit at least 100% of the major source threshold?

If the answer to ALL of the questions is yes and one of the exemptions below does not apply, the unit is subject to the federal CAM requirements.

Exemptions

The CAM rule does not apply to:

- Units and pollutants regulated under a NSPS or NESHAP that was promulgated after November 15, 1990.
- Units and pollutants where continuous compliance monitoring is already required. The rule requires the permittee to use continuous compliance monitoring to satisfy the CAM requirements and additional requirements are not needed.
- Stratospheric ozone protection program requirements.
- Acid rain program requirements.
- Emission limitations or standards that apply solely under an emissions trading program.
- Municipally-owned utility peaking units that meet the following:
 - The unit is exempt from acid rain program monitoring requirements.

- The unit operates for the sole purpose of providing electricity during periods of peak electrical demand or emergency situations.
- The unit will be operated consistent with that purpose throughout the permit term.
- Emissions from the unit are less than 50 tons per year.

Submittal Deadlines

Emission units with the potential to emit a regulated air pollutant equal to or greater than the major source threshold **after** controls will be required to submittal a CAM plan as follows:

- If the initial Part 70 permit application has been submitted and has been determined to be ~~A~~complete@ by April 20, 1998, the CAM submittal shall be part of the permit renewal application.
- If the initial Part 70 permit application has not been submitted or has not been found to be ~~A~~complete@ by April 20, 1998, the CAM submittal shall be part of the initial permit application.
- On or after April 20, 1998, the CAM submittal shall be included with a significant Part 70 permit modification under 326 IAC 2-7-12, but only with respect to those emission units for which the proposed modification is applicable.

Emission units with the potential to emit a regulated air pollutant equal to or greater than the major source threshold **before** controls, but less than major source thresholds **after** controls will be required to submittal a CAM plan with the Part 70 permit renewal application.

CAM Submittals (CAM plans)

The CAM rule requires owners or operators

to design monitoring programs to assure that control devices are operating properly and that corrective action is taken when needed. A CAM submittal should include the following:

T Information on indicators (parameters of control device operation) and equipment (gauges, meters, or other devices used to monitoring operating parameters of control devices).

T Indicator ranges, or the process by which indicator ranges are to be established.

T Performance criteria

T Justification for the proposed monitoring.

T Control device operating data recorded during a performance test, supplemented by engineering assessments or manufacturers' recommendations to justify the proposed indicator ranges.

T If performance test data are not available, a test plan and schedule for obtaining data.

T A monitoring implementation plan, if monitoring requires installation, testing or other activities prior to implementation.

IDEM has developed a sample form that may be used for the CAM submittal and a copy is attached to this fact sheet. Sources are not required to use the form, but must supply the required information and may use the form as a template to develop a source specific form. The current Part 70/FESOP permit application also includes compliance data forms, CD-02 and CD-03, that allow an applicant to provide compliance monitoring information. If one of these forms is used, the form may have to be supplemented with additional information to comply with all of the information requirements

under the CAM rule.

After the owner or operator has submitted the CAM information, IDEM will review the submittal for completeness and adequacy and will determine whether or not the CAM submittal is acceptable. If it is not acceptable, then IDEM will request more information. If it is acceptable, IDEM will establish permit terms and conditions in the Part 70 permit to incorporate the CAM plan.

What does this mean for existing sources with Part 70 permits?

Because existing Part 70 permits include compliance monitoring requirements already, there may not be any changes to those requirements.

Permittees submitting Part 70 permit renewal applications should use the existing monitoring requirements as the starting point for the CAM monitoring requirements. For the most part, the current requirements will probably satisfy the CAM monitoring requirements. However, the permittee should review the current compliance monitoring requirements and evaluate those requirements in light of the CAM rule.

There are probably many instances where the current monitoring under the Part 70 permit will satisfy the CAM requirements in all aspects except for the monitoring frequency. There may be some situations where daily monitoring would have to be upgraded to four times per hour or weekly monitoring upgraded to daily.

Permit Requirements

Once IDEM approves a CAM plan, Part 70 permit terms and conditions will specify what the owner or operator must do concerning monitoring. The permit will include the approved monitoring approach and will identify the following:

- The indicators to be monitored

(e.g., temperature, pressure drop, emissions, or similar parameter).

T The means or device to measure the indicator (e.g., temperature or pressure measurement device, visual observation, continuous emissions monitors).

- The established performance requirements.
- The level at which an exceedance or excursion will have occurred (The CAM rule requires owners or operators to take corrective action in the event of an excursion from an indicator range).
- An obligation to conduct monitoring and comply with the CAM rule, including proper monitoring maintenance, continuous operation when the unit is operating, and responding to excursions and exceedances.
- Where appropriate, minimum data availability requirements for valid data collection for each averaging period and the averaging periods in a reporting period.
- If the CAM plan requires installation, testing or final verification of operational status, enforceable schedules with appropriate milestones for completing such activities.

As stated previously, existing Part 70 permits already include much of this information. IDEM will evaluate the existing permit requirements and the CAM submittal to determine if any changes are required.

Further Information

Interested parties can download or view additional information concerning the CAM rule and the Technical Guidance Document:

Compliance Assurance Monitoring from U.S. EPA's website at the following address:

www.epa.gov/ttn/emc/cam.html

IDEM Contact

Additional information regarding this fact sheet can be obtained by calling (800) 451-6027 (in Indiana), press 0 and ask for Roger Letterman, Compliance Branch, Office of Air Quality, (or extension 2-8342) or dial (317) 232-8342.